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INSTITUTIONAL DISINCENTIVES TO AGRICULTURAL PRODUCTION IN DEVELOPING COUNTRIES

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Foreign Commodity Analysis
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Institutional disincentives to farmers—in such forms as price and export controls, and restrictions on credit and the domestic movement of agricultural products—have the potential for widespread and serious harm, unless these countries have ample foreign exchange to import food—an unlikely situation. Given the present poor external financial position of many developing nations, agricultural disincentives are all the more serious. For a few petroleum-rich countries there is no problem, of course.

In September 1976, the U.S. Department of Agriculture surveyed 44 countries that had been found in an earlier study[1] to have governmental policies that could directly or indirectly discourage production. In 1975, these 44 nations contained 1.6 billion people—two-fifths of the world's population, or four-fifths of the population in the developing nations. In most of these countries, the bulk of the population is concerned with agriculture, and a large proportion of their national income is derived from the sale of agricultural products.

In the 1976 study, approximately 600 disincentives were identified, although it is difficult to count with precision because of the generic nature of some classifications of commodities reported. Price controls were the most often-used disincentive (106 occurences at the producer level and 112 at the retail level). Export controls were the next most-often used (physical limitations, 89 occurences; and export taxes, 70). Least used were restrictions on internal movements (23 occurences).

[1]Results of this study appeared in a supplement to *Foreign Agriculture*, March 1975. The survey covered 50 nations, of which 46 were found to have disincentives to domestic farm production. The current study covers all of these countries, except Spain and Greece. The disincentives reported in the Survey appear in the Appendix, where they are classified by country and commodity.

Disincentives were most often used in Peru (54 times), India (46), and Guatemala (32). They are more widely used in South America and Asia than in Africa, in part reflecting the fact that many African economies are still largely on a subsistence basis.

From the viewpoint of commodities, disincentives were applied most often to rice, wheat and flour products, and sugar—obviously because these are staple products in many developing countries. They are, however, applied to a wide variety of foods—from cassava to beef—and even to some nonfood agricultural products (tobacco, jute, and wool). In total, there were over 30 commodities against which disincentives were applied.

With the exception of Spain and Greece in the first survey, no attempt was made in either survey to ascertain disincentives in developed nations. Paradoxically, many of them have policies that often lead to overproduction of certain agricultural products. They also have policies that tend to restrict agriculture production.

As recently as 1973, U.S. Government set-aside payments for feed grain acreage totaled $1.17 billion, and 9.4 million acres of land were withheld from production.[2] Over the past two decades—during which in most years carryover stocks were large, depressing prices and farm income—U.S. agriculture has been the subject of various production adjustment programs to support farm income. Consequently, such programs have generally had as their objective supply reduction rather than supply expansion.

Current programs that act as restrictions on production in the United States are marketing quotas and acreage allotments for extra long staple cotton, peanuts, and most types of tobacco. Also, recent environmental legislation

[2]*Commodity Fact Sheet*, April 1974, ASCS, USDA.

calls attention to social trade-offs between what is conceived of as being a socially desirable environment, and higher production.

There can, of course, be any number of types of disincentives that are general in nature and thus not specifically disincentives for the agricultural sector. These types of disincentives were not included in either survey. The types of disincentives found in the developing nations that more directly influence agricultural production include:

1. Controlling the producer price of agricultural products.
2. Controlling the retail price of agricultural products.
3. Noncompetitive buying (procurement policy).
4. Export controls.
5. Export taxes.
6. Importing for sale at subsidized prices.
7. Foreign exchange rate controls.
8. Restrictions on farm size, land tenure, and credit.
9. Restrictions on domestic movement of agricultural products.

To more fully appreciate the potential and detrimental effects of these practices, a short discussion of their general nature is given below.

Impact of Disincentives[3]

• **Price controls.** Producers normally try to maximize their profits within (a) the constraints of their technology, (b) the natural resources available to them, and (c) the final demand for the product. The consumer, in turn, tries to maximize satisfaction by demanding at the lowest price possible those products (including goods and services) that directly or indirectly satisfy some need or want. In a market-oriented economy where the forces of supply and demand are more or less free to interact on a competitive basis, both sellers and buyers can on a realistic and sound basis maximize their standards of living.

If a nation lacks foreign exchange to import food commercially and finds that it cannot import on a concessional basis, it must meet any increased requirement for food by stimulating domestic production. One way to accomplish this objective is to free production from artificial constraints, such as prices kept at low levels.

Why then are price controls instituted? In some cases, governments desire to control the price of food for political reasons; for many developing countries food prices comprise the largest component in the consumer price index—the primary indicator of the degree of inflation—and, when these prices rise rapidly, are often considered a mark of failure on the part of the government.

In many cases, however, the objective of price controls is a more equitable distribution of food, especially where there are inadequate domestic supplies and wide dispersion in the level of income. Unfortunately, when brought about by price controls, an improvement in food distribution in the short run may dampen production in subsequent periods. Also, prices set too low discourage farmers from using productive but costly inputs, such as improved seeds, fertilizers, irrigation, and pesticides—all needed to increase production.

Fortunately, the updated survey of September 1976, indicates some shift in government policies from controls on producer prices to support price systems that establish minimum guaranteed prices.

An increase in these minimum prices, for instance, almost certainly stimulated production of rice in Thailand. Previously, the Government was paying farmers a price far below the world price level. With the decline in rice prices since mid-1974, perhaps the minimum guaranteed price should now be lowered. But in any case, the changes in the level of production indicate—if they do not prove—the responsiveness of production to changes in prices.

• **Procurement policies.** Certain procurement policies and forms of noncompetitive buying can be constraints that lead to lower than potential production. Such policies—where a government or a government-sponsored agency is the sole buyer of a product—may have adverse effects on both producers and consumers. Very often these practices are used to secure supplies for consumers at relatively low prices or to secure revenue for the government. However, producers, especially marginal producers, may be deprived of a price that covers total cost, and the consumer eventually may find himself paying more for a smaller output.

Noncompetitive buying is practiced in many developing countries such as India, Pakistan, Sri Lanka, and many Latin American and African countries. Commodities commonly subject to these practices are wheat, rice, and vegetable oils.

In some countries where noncompetitive buying causes a loss to farmers, government subsidies are given to farmers to more or less offset the loss. One effect is a heavy burden on the government's budget since the government must subsidize both consumers and food producers. Practices in Iran and Venzuela typify this arrangement. These two countries are oil-rich OPEC (Organization of Petroleum Exporting Countries) nations and few developing countries can afford to copy their example. Such policies, although they seem plausible, can lead to a lower production level than under a competitive system and perhaps distort the cropping patterns of these countries. This can result from the lag between paying production costs and receiving the subsidy, or from the inequity of subsidies among various types of enterprises.

• **Export controls and taxes.** To domestic producers, export controls limit, sometimes absolutely prohibit, foreign sales—thus shrinking geographically and economically the total marketing area available to them. The supply of agricultural commodities offered for sale within the country exercising export controls, of course, will be increased

[3]This survey does not deal explicitly with interdependencies among commodities. It is recognized that a disincentive for one commodity may prove to be an incentive for another commodity, or the same commodity in another country.

at least in the short-run. The short-run increase in supply most likely will reduce prices and expand domestic sales. However, the reduced price may be one that produces revenue that is less than cost for marginal producers, thus reducing the incentive to increase, or perhaps even to maintain, production levels.

An export tax will not limit legally the geographic market available to producers, but economically the effect may be somewhat the same. This is the case when the export tax means a higher price to various importing nations—especially if these nations can find alternative sources of supply, or other commodities that will serve as substitutes. If on the other hand, the world market is very competitive and market forces determine prices, the exporting nation must sell at prevailing prices. Since the export tax cannot be added to the price in this case, the tax becomes a tax on producers and the disincentive naturally follows.

In the case of both export controls and taxes, foreign exchange earnings are most likely foregone that may be badly needed to import essential items. Such items may be impossible to obtain domestically or obtained only with the application of a great deal of time, energy, and resources—all of which could be used in other ways to increase standards of living.

• **Import subsidization**. In an effort to control inflation and to provide consumers with an adequate supply of basic food commodities, some governments resort to import subsidization. That is, governments import at one price but sell domestically at a lower price, or perhaps even distribute freely. Unless incomes are so low that the food would not have been purchased in any case, this policy obviously will lower prices and discourage producers within the country from expanding production.

For example, improved seed varieties, around which the "green revolution" was built, require intensive use of fertilizers, irrigation, and pesticides. Unless domestic prices are high enough—or other incentives are available to justify the investment in such costly inputs—producers have no incentive to expand their production.

• **Exchange rate controls**. In general, controls on foreign exchange proceeds of agricultural exports take the form of requirements to surrender the proceeds within a specified time or to surrender the proceeds at a specified minimum price of the item exported. Limiting the time an exporter may hold his proceeds in dollars or other convertible currencies may force him to exchange his proceeds at an undervalued level. By waiting, he might benefit through a devaluation of his native currency, which would allow the exporter to receive more local currencies per dollar surrendered.

Specifying a minimum export price at which foreign exchange proceeds are submitted, may at times remove the flexibility an exporter needs to consummate a sale. Either the exporter foregoes a sale—if the world market price is beneath the specified price—or the exporter may be required to make up the difference between the price he can obtain in the world market and the specified price level at which he must submit foreign exchange proceeds.

• **Restrictions on land tenure and credit**. Imposition of these restrictions on farmers constitutes a serious barrier to the expansion of agricultural production in many developing countries. Despite the increased number of farmers owning land because of land reform, many developing countries have subsequently experienced lower output. While land is an important factor of production, other factors must be combined with land to maintain or increase the level of production. During the early stages of adjustment after land reform, new owners are usually farm workers with limited experience in farm management and most likely with little or no liquid funds to cover the variable costs of production. Poor management and the lack of funds result in inefficient use of resources and a decline in output unless these deficiencies are corrected.

Restrictions on land tenure that limit farm size could discourage farmers from investing highly productive inputs, and cause a loss of scale economies. In the Dominican Republic, for example, the land tenure law, which limits rice land ownership to 80 acres, has been one reason that country has needed to import rice over the past several years. The effect of this policy has been further amplified by controls on farm prices.

In another example, after Tunisia eliminated its policy of requiring State-controlled farm organizations in the late 1960's, the countrys per capita agricultural production rose by 58 percent from the average level in 1961-65 to 1976. For all developing countries there was only an 8 percent gain.[4]

Rural credit policies that limit the amount of credit given to small farmers have limited the expansion of the agricultural production in many developing countries. For example, the Government of Indonesia, in order to compensate rice producers for low rice prices, offers them subsidized credit. However, since the banking system views small farmers as high-risk borrowers, only the larger farmers benefit from the subsidized financing that facilitates the adoption of new production techniques. Therefore, it is only the larger farmers who have the negative impact of low rice prices partially neutralized through Government-subsidized credit programs. This results in inefficient resource allocation by depriving a large number of small farmers of liquidity to improve their level of production. In many other countries, applications for loans require a land title, which is not generally easy to provide.

• **Restrictions on domestic movement of agricultural products**. Whatever the political justification may be, the prohibition on shipment of farm products from surplus districts to deficit districts within a country obviously discourages farmers in the surplus areas from producing more. Almost certainly the existence of such restrictions in India amplified the impact of food shortages following the 1974 drought and floods in India, where some States, such as West Bengal, were hit harder than others.

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[4]Data from USDA, Economic Research Service, *Food Production Indices*, 1977.

Another example is Indonesia, where inter-island shipments of rice are prohibited except under Government auspices.

Conclusions

While it is beyond the scope of this report to present a quantitative evaluation of the net effect of various policies in different countries, a general indication about each country's need to expand its agricultural output is indicated by Table 1. For two-thirds of the countries included in this study, containing 1.6 billion people, the long-term rate of growth (1952-72) in domestic demand for food exceeded that for food production. Furthermore, the most optimistic food projections indicate that Asian developing nations will continue to be heavy foodgrain importers through 1985. These projections also indicate that India, Pakistan, Bangladesh, and Sri Lanka will continue in most years to be heavy grain importers within this region for the next decade.

The ability of various countries to import food at present is indicated in a general way by the data in Table 2. Many of these countries have current account deficits and a low level of reserves relative to the level of their imports. Those with good financial positions are mainly petroleum-producing countries, or supported by petroleum rich countries.

These data also indicate the ability of various countries to import such additional farm inputs as fertilizers, pesticides, and farm machinery. Recent estimates by the FAO (Food and Agriculture Organization) Emergency Fertilizer Supply Scheme indicate that the four Asian nations mentioned above accounted for nearly 80 percent of the world fertilizer shortfall in 1974.[5]

The nine disincentives discussed here are of course only some of the factors affecting total world food production. But it seems reasonable that food production could be substantially increased if these restrictive policies were replaced with incentives for farmers.

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[5]Tennessee Valley Authority, *An Appraisal of the Fertilizer Market and Trends in Asia, 1975.*

TABLE 1. ANNUAL GROWTH RATE OF POPULATION, FOOD SUPPLY, AND DOMESTIC DEMAND FOR FOOD, SELECTED DEVELOPING COUNTRIES, 1952-72[1]

(Percent)

Country	Population	Food production	Domestic demand for food	Country	Population	Food production	Domestic demand for food
Costa Rica	3.8	5.4	4.8	Bangladesh	3.5	1.6	- - -
Dominican Rep	3.3	2.2	3.6	Burma	2.2	2.4	3.3
El Salvador	3.0	3.6	4.1	India	2.1	2.4	3.0
Guatemala	3.0	4.1	4.2	Indonesia	2.5	2.0	2.6
Honduras	3.3	4.0	4.2	Malaysia (West)	3.0	5.2	4.3
Mexico	3.4	5.3	4.3	Pakistan	3.0	3.0	4.2
Nicaragua	3.0	4.9	3.9	Philippines	3.2	3.2	4.2
Panama	3.2	4.3	4.8	Sri Lanka	2.5	3.6	3.1
Trinidad & Tobago	2.5	1.9	4.8	Thailand	3.1	5.3	4.6
Argentina	1.7	1.8	2.0	Egypt	2.6	3.4	3.8
Bolivia	2.3	5.0	2.7	Iran	2.8	3.3	6.4
Brazil	3.0	4.4	4.0	Jordan	3.2	1.8	6.6
Chile	2.5	2.2	3.3	Syria	3.0	1.8	4.6
Colombia	3.3	3.1	3.9	Turkey	2.7	3.0	3.8
Ecuador	3.3	5.4	4.0				
Paraguay	3.1	2.6	3.4				
Peru	2.9	2.9	3.9				
Uruguay	1.3	0.8	1.2				
Venezuela	3.5	6.1	4.0				
Angola	1.8	2.7	3.0				
Ghana	2.9	3.9	3.2				
Ivory Coast	2.2	4.9	2.6				
Kenya	3.0	2.6	4.6				
Liberia	1.5	1.1	1.8				
Morocco	3.0	2.8	3.3				
Nigeria	2.4	2.0	3.1				
Senegal	2.2	3.3	1.2				
Sierra Leone	2.0	2.4	3.9				
Zaire	2.0	0.2	2.3				

[1] Data not available for Belize.

Source: Monthly Bul. of Ag. Econ. & Stat. 9 Vol. 23, Sept. 1974, FAO, Rome.

Table 2. MEASURES OF EXTERNAL FINANCIAL POSITION OF SELECTED DEVELOPING COUNTRIES[1]

Country	Balance on current account[2]	Import coverage[3]	Country	Balance on current account[2]	Import coverage[3]
	Mil. dol.	*No. of months*		*Mil. dol.*	*No. of months*
Costa Rica	- 205	1.6	Bangladesh	- 159*	(4)
Dominican Rep	- 60*	1.7	Burma	- 80*	11.4
El Salvador	22	3.7	India	1,302**	7.6
Guatemala	- 4	4.9*	Indonesia	-1,037*	3.1
Honduras	- 112	2.9*	Malaysia (West)	- 186*	7.8
Mexico	-4,057*	2.8*	Pakistan	-1,037*	3.0
Nicaragua	- 184*	3.4	Philippines	- 923*	5.0
Panama	- 132*	.6**	Sri Lanka	- 109*	1.9
Trinidad & Tobago	144	6.1	Thailand	- 607*	6.4
Argentina	610	6.4	Egypt	-1,397*	1.2
Bolivia	- 159*	3.4*	Iran	5,375*	7.7
Brazil	-7,080*	5.8	Jordan	67*	8.0*
Chile	42	.7*	Syria	93*	5.3*
Colombia	- 80*	4.2*	Turkey	-1,841*	2.6
Ecuador	- 1	6.2			
Paraguay	- 72*	6.5*			
Peru	-1,569*	2.2*			
Uruguay	- 203*	4.8*			
Venezuela	2,206*	15.4			
Angola	301***	(4)			
Ghana	- 34*	2.3*			
Ivory Coast	- 307*	.7			
Kenya	- 189*	3.4			
Liberia	74*	.5*			
Morocco	-1,552*	1.8**			
Nigeria	259*	11.5*			
Senegal	- 66**	.6*			
Sierra Leone	- 63*	1.8*			
Zaire	- 610*	.7*			

[1] 1976 unless otherwise noted. * = 1975, ** = 1974, *** = 1973. Data not available for Belize.

[2] Includes international transactions with regard to goods, services (insurance, transportation, etc.) and unilateral transfers (gifts, worker remittances, etc.).

[3] The number of months of imports covered by most recent level of international monetary reserves.

[4] Not available.

NOTE: In the tables that follow X indicates the existence of a disincentive.

APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Central America									
Costa Rica									
Rice	X	X	([1])	---	X	---	---	---	---
Beans	X	X	([1])	---	X	---	---	---	---
Beef	---	X	([1])	([1])	X	---	---	---	---
Sugar	([1])	X	([1])	---	X	---	---	---	---
Dairy	X	X	---	---	---	---	---	---	---
Bananas	---	---	---	---	X	---	---	---	---
Coffee	([1])	([1])	([1])	---	X	---	---	---	---
Corn	X	X	([1])	---	X	---	---	---	---
Dominican Republic									
Rice	X	X	---	X	---	---	---	X	X
Beef	X	X	---	X	X	---	---	X	---
Sugar	---	X	---	---	X	---	---	X	---
Corn	X	X	---	X	---	---	---	---	---
Dairy	X	X	---	---	---	---	---	X	---
Cocoa	---	---	---	---	X	---	---	---	---
El Salvador									
Meat	---	---	---	X	---	---	---	---	---
Milk	X	X	---	---	---	---	---	---	---
Grains	X	X	---	X	---	---	---	---	---
Sugar	X	X	X	X	---	---	---	---	---
Coffee	---	---	---	X	X	---	---	---	---
Other foodstuffs	X	X	X	---	---	---	---	---	---

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POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976–Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Central America–(cont.)									
Guatemala									
Meat	X	X	---	X	X	---	---	X	---
Sugar	X	X	---	X	X	---	---	---	---
Cotton	X	---	---	X	X	---	---	---	---
Milk	X	X	---	---	---	---	---	---	---
Coffee	---	---	---	X	X	---	---	---	---
Bananas	---	---	---	---	X	---	---	---	---
Corn	X	X	---	X	---	---	---	---	---
Rice	X	X	---	•X	---	---	---	---	---
Beans	X	X	---	X	---	---	---	---	---
Cattle	---	---	---	X	X	---	---	---	---
Tobacco	---	---	---	X	X	---	---	X	X
Honduras									
Sugar	X	X	X	---	X	---	---	X	---
Bananas	---	---	---	---	X	---	---	X	---
Milk	X	X	---	---	---	---	---	X	---
Cattle	---	---	---	---	---	---	---	X	---
Mexico									
Tobacco	---	---	X	---	---	---	---	X	---
Sugar	X	X	---	X	---	---	---	X	---
Livestock	---	---	---	X	X	---	---	X	X
Grains/oilseeds	---	---	---	X	---	---	---	X	---
Other foodstuffs	---	X	---	X	X	---	---	X	X
Nicaragua									
Milk	X	X	---	---	---	---	---	---	---
Cotton, Coffee, Tobacco	---	---	---	---	X	---	---	X	---

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APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Central America—(Cont.)									
Bananas, Rice, Sugar	X	X	---	---	X	---	---	---	---
Hides, Cattle, Beef	---	---	---	X	---	---	---	---	---
Cottonseed	---	---	---	X	---	---	---	---	---
Panama									
Beef	X	X	---	X	---	---	---	---	---
Other consumer item	X	X	X	---	---	X	---	---	---
Trinidad and Tobago									
Broilers	X	X	---	---	---	---	---	---	---
Rice	X	X	X	---	---	X	---	---	---
Copra	X	---	---	---	---	---	---	---	---
Belize									
Sugar	X	X	---	---	X	---	---	X	---
Beef	X	X	---	---	---	---	---	X	X
Most foodstuffs	X	X	---	---	---	---	---	X	---
South America									
Argentina									
Beef	---	---	---	---	X	---	X	---	---
Grains	---	---	---	---	X	---	X	---	---
Oilseeds	---	---	---	X	X	---	X	---	---
Vegetable oils	---	---	---	---	X	---	X	---	---
Oilseed products	---	---	---	X	X	---	X	---	---
Other commodities	---	---	---	---	X	---	X	---	---
Bolivia									
Cotton	---	---	---	---	X	---	---	---	---
Many food products	X	X	X	---	---	---	---	---	X

—Continued

APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Brazil									
Beef	X	---	---	---	---	---	---	---	---
Milk	X	X	---	---	---	---	---	---	---
Soybean oil	---	---	---	X	---	---	---	---	---
Frozen orange juice concentrate	---	---	---	([1])	---	---	---	---	---
Sugar	X	X	X	X	([1])	---	---	---	---
Cocoa	---	---	---	---	X	---	---	---	---
Coffee	---	---	---	---	X	---	---	---	---
Chile									
Wheat & wheat prod	X	X	X	X	---	---	X	X	---
Sugarbeets	X	X	X	X	---	---	X	X	---
Vegetable oil	X	X	---	---	---	---	X	X	---
Beef	---	---	---	---	---	---	X	X	---
Milk & milk prod	---	---	---	---	---	---	X	X	---
Rice	---	---	---	---	---	---	X	X	---
Columbia									
Sugar	X	X	X	X	---	---	X	---	X
Corn & feedgrains	---	---	---	X	---	---	X	---	---
Soybeans	---	---	X	X	---	---	X	---	---
Coffee	X	---	X	X	X	---	X	---	X
Wheat	---	X	X	---	---	---	X	---	X
Cotton	---	---	---	X	---	---	X	---	---
Palm oil	---	X	X	X	---	---	X	---	---
Cocoa	---	X	---	X	---	---	X	---	---
Tobacco	---	X	---	X	---	---	X	---	---
Beef	---	X	---	X	---	---	X	---	---

—Continued

APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Ecuador									
Coffee, cocoa	---	---	---	---	X	---	---	---	---
Sugar	---	---	---	X	X	---	---	---	---
Bananas	---	---	---	---	X	---	---	---	---
Most basic foods	---	X	---	---	---	---	---	X	---
Wheat	X	---	---	---	---	---	---	---	---
Paraguay									
Beef	X	X	---	X	---	---	---	---	---
Soybeans	X	---	---	---	X	---	---	---	---
Wheat	X	---	---	---	---	---	---	---	---
Sugarcane	X	---	---	---	---	---	---	---	---
Peru									
Livestock	---	---	---	X	X	---	---	X	---
Meat	X	X	X	---	---	---	---	---	---
Milk	X	X	X	---	---	---	---	---	---
Other dairy prod	X	X	---	---	---	X	---	---	---
Wheat	X	X	X	X	---	---	---	---	---
Rice	X	X	X	X	---	---	---	---	---
Sugar	X	X	X	X	---	---	---	---	---
Potatoes	X	X	X	---	---	---	---	---	---
Beans	X	X	X	---	---	---	---	---	---
Coffee	X	X	X	---	---	---	---	---	---
Vegetable oils	X	X	---	---	---	X	---	---	---
Feedgrains	X	X	X	---	---	X	---	---	---
Oilseeds	X	X	X	---	---	X	---	---	---
Fish meal & oil	---	---	X	X	---	---	---	---	---

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APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import sub-sidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limita-tions	Export taxes			Credit and land tenure	Internal move-ments
Cotton	---	---	---	X	X	---	---	---	---
Wool	---	---	---	X	X	---	---	---	---
Tobacco	X	X	X	X	---	---	---	---	---
South America—(Cont.)									
Uruguay									
Beef	X	X	---	---	---	---	X	---	---
Wheat	---	X	---	X	---	---	X	---	---
Other grains	---	---	---	X	---	---	X	---	---
Oilseeds	---	---	---	X	---	---	X	---	---
Oilseeds products	---	---	---	X	---	---	X	---	---
Wool	---	---	---	---	---	---	X	---	---
Other commodities	---	---	---	---	---	---	X	---	---
Venezuela									
Sugar	---	X	---	(1)	---	X	---	---	---
Tobacco	---	X	---	---	---	---	---	---	---
Rice	---	X	---	(1)	---	X	---	---	---
Feed grains	---	X	---	---	---	X	---	---	---
Meat, milk & eggs	---	X	---	---	---	X	---	---	---
Oilseeds	---	X	---	---	---	X	---	---	---
Africa									
Angola									
Coffee	---	---	---	---	X	---	---	---	---
Ghana									
Cocoa	X	---	X	---	---	---	---	X	---
Seed cotton	X	---	X	---	---	---	---	X	----

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APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976–Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Ivory Coast									
Coffee	X	---	X	---	---	---	---	---	---
Cocoa	X	---	X	---	---	---	---	---	---
Rice	X	---	X	---	---	---	---	---	---
Kenya									
Wheat	X	---	---	---	---	---	---	X	---
Corn	X	---	---	---	---	---	---	X	---
Sugar	X	---	---	---	---	---	---	---	---
Rice	X	---	---	---	---	---	---	---	---
Liberia									
Many commodities	X	X	X	---	---	---	---	---	X
Morocco									
Oranges	---	---	---	---	X	---	---	X	---
Wheat products	X	X	---	---	---	X	---	---	---
Other staple foods	X	X	---	---	---	---	---	X	---
Nigeria									
Cocoa	([1])	---	X	---	---	---	---	X	---
Seed cotton	X	---	X	---	---	---	---	X	---
Senegal									
Peanuts	X	---	X	---	---	---	---	---	---
Rice	X	---	X	---	---	---	---	---	---
Sierra Leone									
Some commodities	X	---	X	---	---	---	---	X	---

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APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Zaire									
Palm oil	X	X	---	X	---	---	---	---	---
Coffee	---	X	---	---	X	---	---	---	---
Tobacco	---	X	X	---	X	---	---	---	---
Rice	X	X	---	---	---	---	---	---	---
Sugar	X	X	---	---	---	---	---	---	---
Tea	X	---	---	---	X	---	---	---	---
Cocoa	---	---	---	---	X	---	---	---	---
Far East									
Bangladesh									
Wheat	---	---	---	X	---	X	---	---	---
Rice	---	---	---	X	---	X	---	---	---
Edible oils	---	---	---	X	---	X	---	---	---
Burma									
Rice	X	---	X	X	---	---	---	---	---
India									
Coffee	X	X	---	X	X	---	X	---	X
Jute	---	---	---	X	X	---	X	---	---
Cereals	---	---	---	X	---	---	X	X	---
Rice	X	X	X	X	---	---	X	X	X
wheat	X	X	X	X	---	---	X	X	X
Cotton	X	---	X	X	---	---	X	X	X
Peanut oil, rape, mustard oil	X	X	---	X	X	---	X	X	---
Peanuts, peanut-cake & meal	---	---	---	X	X	---	X	X	---
Many other oils & oil products	---	---	---	X	---	---	X	X	---
Pepper	---	---	---	---	X	---	---	---	---

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APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Indonesia									
Rice	X	X	X	---	---	X	---	X	X
Sugar, cassava, copra, soybeans and peanuts	---	---	---	---	---	---	---	X	---
Malaysia (West)									
Palm oil	---	---	---	---	---	X	---	---	---
Rice	X	X	---	---	---	---	---	---	---
Paistan									
Wheat, flour	X	X	---	X	---	X	---	X	X
Vegetable oil	X	X	---	X	---	X	---	X	---
Seed cotton	X	---	---	X	---	---	---	---	X
Rice	---	---	X	---	---	---	---	X	X
Raw cotton	---	---	---	---	X	---	---	---	---
Philippines									
Desiccated coconut	---	---	---	---	X	---	---	---	---
Copra	---	---	---	---	X	---	---	---	---
Coconut oil	---	---	---	---	X	---	---	---	---
Tobacco	---	---	---	---	X	---	---	---	---
Canned pineapple	---	---	---	---	X	---	---	---	---
Bananas	---	---	---	---	X	---	---	---	---
Poultry-eggs	---	X	---	---	---	---	---	---	---
Pork-beef	---	X	---	---	---	---	---	---	---
Sugar	X	X	X	X	X	---	---	---	---
Rice	X	X	---	---	---	X	---	---	---
Corn	X	X	---	---	---	X	---	---	---
Sri Lanka									
Rice	X	---	X	---	---	X	---	---	---

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APPENDIX

POTENTIAL DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COUNTRY AND COMMODITY, 1976—Continued

Country and commodity	Price controls		Non-competitive buying	Export controls		Import subsidies	Foreign exchange controls	Restrictions on:	
	At producer level	At retail level		Physical limitations	Export taxes			Credit and land tenure	Internal movements
Far East—(Cont.)									
Thailand									
Rice	---	X	X	X	X	---	---	---	---
Sugar	---	X	---	X	X	---	---	---	---
Near East									
Egypt									
Cotton	X	---	X	---	---	---	---	X	X
Rice	X	---	X	---	---	---	---	X	X
Iran									
Wheat	---	X	---	---	---	X	---	([1])	---
Rice	---	X	---	---	---	X	---	---	---
Oilseeds & veg oil	---	X	---	---	---	X	---	---	---
Livestock, meat, milk	---	X	---	---	---	X	---	X	---
Jordan									
Wheat flour	---	X	---	---	---	X	---	---	---
Syria									
Seed cotton	X	---	X	X	---	---	---	X	---
Wheat and barley	X	---	X	X	---	---	---	X	X
Tobacco	---	---	X	---	---	---	---	---	---
Sugar beets	---	---	X	---	---	---	---	---	---
Turkey									
Wheat	---	X	---	X	---	X	---	---	---
Livestock	---	X	---	X	---	---	---	---	---
Cotton	---	---	---	---	---	---	---	---	---
Tobacco	---	---	---	---	---	---	---	---	---

[1] Not a disincentive at the present time because of the supply-demand situation.